Amdt. Dated: PROPOSED

Reply to Office Action of September 10, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Docket No. HI-0055

**Listing of Claims:** 

1-30. (Cancelled)

31. (Currently Amended) A method for controlling a transmission power of a

transport format combination indicator (TFCI) field for a downlink shared channel (DSCH),

when an associated DCH is in a situation of soft handover, in a mobile communication

systemstation communicating with at least one base station through a dedicated channel

(DCH) the method comprising the steps of:

selecting at least one base station transmitting the TFCI for the DSCH;

determining whether a primary base station that transmits the DSCH is

primary base station or notexists among the at least one selected base station; and

performing power control differently according to whether a base station

which transmits the DSCH is the primary base station or not and whether a SSDT mode is

operating or not controlling the transmission power of the TFCI using a power offset based

on determining whether the primary base station exists among the selected at least one base

station.

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32. (New) The method of claim 31, wherein the TFCI for the DSCH is described

by a code word which is different from a code word of a TFCI for the DCH.

33. (New) The method of claim 31, wherein the DCH includes a dedicated

physical data channel (DPDCH) and a dedicated physical control channel (DPCCH).

34. (New) The method of claim 33, wherein the TFCI is received through the

DPCCH.

35. (New) The method of claim 31, wherein the primary base station is

determined using a site selection diversity transmit (SSDT) operation.

36. (New) The method of claim 31, wherein when the base station transmitting

the TFCI is the primary base station, the power offset is greater than when the base station

transmitting the TFCI is a non-primary base station.

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- 37. (New) The method of claim 31, wherein the power offset is determined based on a number of radio links connected to the mobile station and a number of radio links transmitting the TFCI.
- 38. (New) A method for controlling a transmission power of a transport format combination indicator (TFCI) for a downlink shared channel (DSCH) in a mobile station communicating with at least one base station through a dedicated channel (DCH), comprising:

measuring a first signal to interference ratio (SIR) using pilot signals in a dedicated physical control channel (DPCCH);

measuring a second SIR using TFCI signals in the DPCCH; and independently controlling a transmission power of the DCH and the TFCI for the DSCH based on the measured first and second SIRs.

39. (New) A method of transmitting power control information for a transport format combination indicator (TFCI) for a downlink shared channel (DSCH) in a second radio network controller (RNC), when a mobile station performs handover from an area of a first RNC to an area of the second RNC, comprising:

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receiving from the first RNC, a control frame including a parameter for

controlling a transmission power for the TFCI for the DSCH; and

transmitting to at least one base station in the second RNC, a control frame

including the parameter.

40. (New) The method of claim 39, wherein the TFCI for the DSCH is coded by

a code word which is different from a code word of a TFCI for a dedicated channel (DCH).

41. (New) The method of claim 39, wherein the handover is a soft-handover for a

dedicated channel (DCH), and a hard-handover for the DSCH.

42. (New) The method of claim 39, wherein the control frame is transmitted

using a protocol on the user plane.

43. (New) The method of claim 42, wherein the parameter is a power offset value

for controlling the transmission of the power control value.

44. (New) The method of claim 43, wherein the parameter is transmitted using a

Radio Interface Parameter Update message in the control frame.

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45. (New) The method of claim 44, wherein the parameter includes a first power offset value and a second power offset value, and

wherein the first power offset value is used when a base station transmitting the TFCI is a non-primary base station in the DCH handover, and the second power offset value is used when a base station transmitting the DSCH among base stations transmitting the TFCI is a primary base station in the DCH handover.

- 46. (New) The method of claim 45, wherein the Radio Interface Parameter

  Update message comprises 6 octets, and wherein the first power offset value comprises a 5th octet with 7 bits length.
- 47. (New) The method of claim 46, wherein the second power offset value comprises a 6th octet with 7 bits length.
- 48. (New) The method of claim 47, wherein the Radio Interface Parameter Update Message includes a Radio Interface Parameter Update Flags field comprising a 1<sup>st</sup> octet and 2<sup>nd</sup> octet, and wherein a third bit of the Radio Interface Parameter Update Flags

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field indicates whether a valid first power offset value is included and a fourth bit indicates whether a valid second power offset value is included.

49. (New) The method of claim 39, wherein the parameter is transmitted using a dedicated control frame.

50. (New) The method of claim 39, further comprising:

receiving, from the first RNC, an indicator indicating whether the parameter is included; and

transmitting to the selected at least one base station, the indicator indicating whether the parameter is included.

- 51. (New) The method of claim 50, wherein the indicator is received and transmitted using a Radio Link Setup message from the first RNC.
- 52. (New) The method of claim 50, wherein the indicator is received and transmitted using a Radio Link Reconfiguration Preparation message to the selected at least one base station.

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53. (New) The method of claim 50, further comprising:

receiving from the at least one selected base station which supports the TFCI power control, a Radio Link Setup message including a TFCI power control support indicator; and

transmitting, to the first RNC, a Radio Link Setup message including a TFCI power control support indicator.